

### ABSTRACT

The present disclosure provides a process for preparing a purified lactic acid solution suitable for use in connection with a source of lactate material a pH within the range of 0.8 to 9.0. The process includes the steps of providing a source of lactate material which includes a calcium salt; acidulating the concentrated broth with sulfuric acid to form an acidulated solution which includes lactic acid and calcium sulfate; reducing an amount of calcium sulfate from the acidulated solution; extracting the acidulated solution with an amine extractant to form a loaded solvent; and back extracting the loaded solvent with an aqueous solvent to provide a purified solution of lactic acid. Optionally, the source of lactate material can be concentrated prior to the step of acidulating. Alternately, the amine extractant can include sulfate anion. The sulfuric anion in the amine extractant can be residual sulfuric acid from the acidulation step. Alternately, the sulfuric acid in the amine extractant can be added during the extraction step, for example, as sulfuric acid.